APPROVED
By Olivia Yu at 2:36 pm, Jan 03, 2018

NMOCD approves of the corrective actions for 1RP-4803 and grants closure.

Confirmation of Corrective Actions

South Hat Mesa
Lea County, New Mexico
1RP-4803

Prepared for:

370 17th St., Suite 2500
Denver, CO 80202

Prepared by:

2620 W. Marland
Hobbs, NM 88240

December 19, 2017

Confirmation of Corrective Action

Tasman Geosciences, Inc. (Tasman) has prepared the Confirmation of Corrective Action on behalf of DCP Midstream, LP (DCP) to document the results of field activities that were conducted at the South Hat Mesa (GPS 32.5072 -103.6721) located in Lea County, New Mexico.

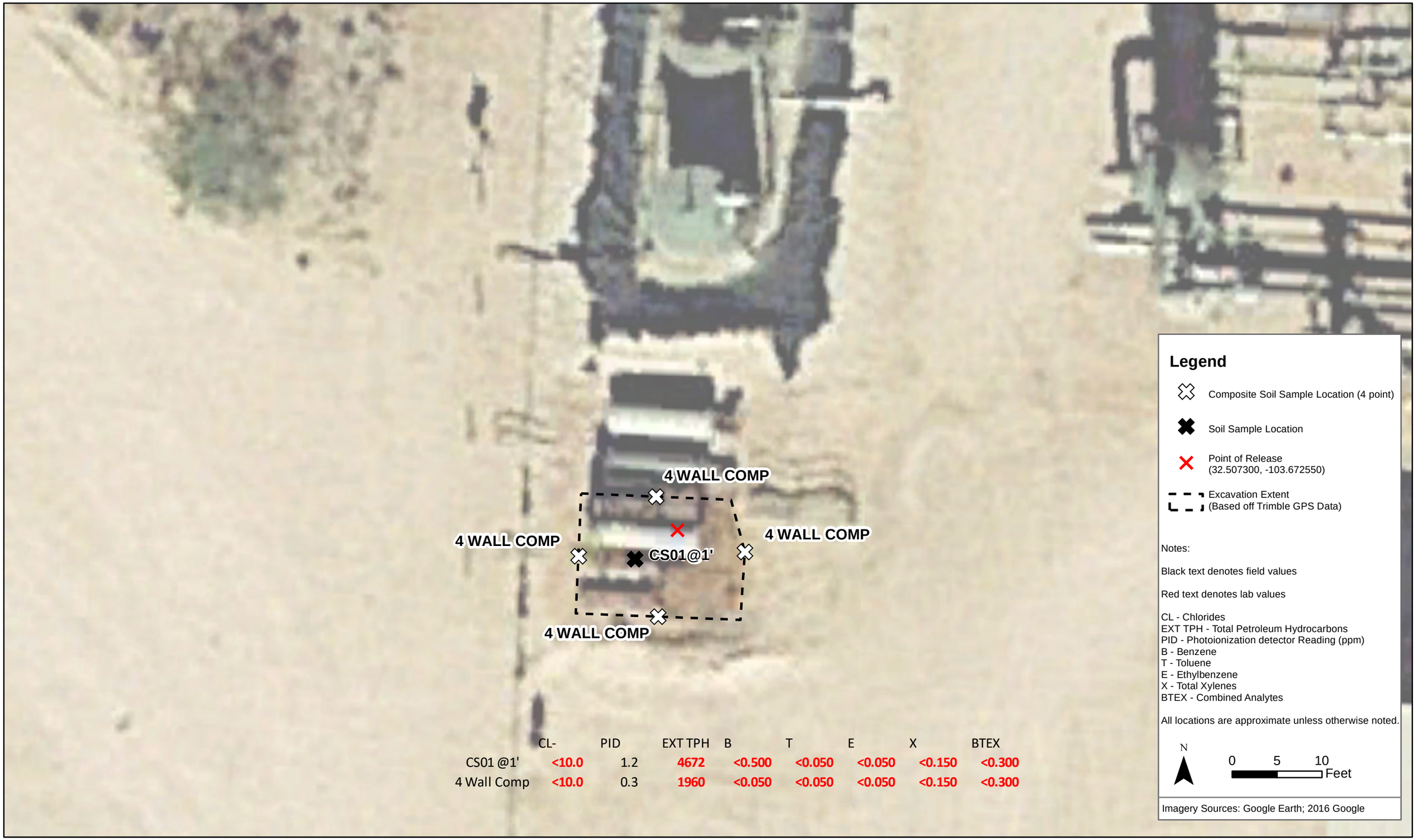
On August 30, 2017, approximately 225 gallons of lube oil was released to an earthen containment as a result of cattle bumping and opening a small valve on an elevated tank. Contractors working on the location responded; closing the valve and recovering 200 gallons of lube oil via vacuum truck. On November 29, 2017 the release area was GPS mapped (Figure 1) and excavated to 1' and samples were collected, the samples were field tested for chlorides and organic vapors, and representative samples were taken to a commercial laboratory for analysis (Appendix B) and photographed (Appendix C). The laboratory analytical results on confirmation sample 01 @1' (CS01@1') and the 4-wall composite are below NMOCD regulatory limits. No water depth of ground water was found on a search radius of 1700 meters on NMOSE data base (Appendix D), extended radius to 10,000 meters to have a depth to ground water of +/- 325'.

A total of 12 cubic yards of contaminated soil were exported and disposed of at Lazy Ace Land Farm. A total of 12 cubic yards of 1" gravel was imported for backfill.

Attachments:

Figure 1−Excavation Overview
Appendix A – Initial C141
Appendix B – Laboratory Analyses
Appendix C – Photo Documentation
Appendix D – NMOSE DGW

Figures



	CL-	PID	EXT TPH	B	T	E	X	BTEX
CS01 @1'	<10.0	1.2	4672	<0.500	<0.050	<0.050	<0.150	<0.300
4 Wall Comp	<10.0	0.3	1960	<0.050	<0.050	<0.050	<0.150	<0.300

Legend

- Composite Soil Sample Location (4 point)
- Soil Sample Location
- Point of Release (32.507300, -103.672550)
- Excavation Extent (Based off Trimble GPS Data)

Notes:

Black text denotes field values

Red text denotes lab values

CL - Chlorides
EXT TPH - Total Petroleum Hydrocarbons
PID - Photoionization detector Reading (ppm)
B - Benzene
T - Toluene
E - Ethylbenzene
X - Total Xylenes
BTEX - Combined Analytes

All locations are approximate unless otherwise noted.

N

0 5 10 Feet

Imagery Sources: Google Earth; 2016 Google

DATE: December 2017 DESIGNED BY: K. Norman DRAWN BY: D. Arnold	TASMAN GEOSCIENCES **Tasman Geosciences Inc.** **6899 Pecos Street - Unit C** **Denver, CO 80221**	**DCP Midstream** **South Hat Mesa Release** NESE Section 4, Township 21 South, Range 32 East Lea County, New Mexico	Excavation Overview Figure	Figure 1

Appendix A

CERTIFIED MAIL, RETURN RECEIPT REQUESTED (7017 1450 0000 2692 5681)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

Initial only

OPERATOR

X Initial Report X Final Report

Name of Company DCP Operating Company, LP	Contact Rob Gough
Address 10 Desta Drive	Telephone No. 432-620-4166
Facility Name Suite 500W	Facility Type Booster Station

Surface Owner BLM	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	4	21S	32E	90	North	10	West	Lea

Latitude 32.5072 **Longitude** -103.6721 NAD83

NATURE OF RELEASE

Type of Release Lube Oil	Volume of Release 225 gallon	Volume Recovered 200 gallon
Source of Release Ancillary storage tank	Date and Hour of Occurrence 08:00AM (MT), 8/30/2017	Date and Hour of Discovery 08:00AM (MT), 8/30/2017
Was Immediate Notice Given? ☐ Yes ☐ No X Not Required	If YES, To Whom?	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes X No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

RECEIVED
By Olivia Yu at 1:19 pm, Sep 06, 2017

Describe Cause of Problem and Remedial Action Taken.*

Cattle jumped the fence and were on the booster station property near the ancillary maintenance tanks. Contractors working at the location approached and witnessed the cattle bump and open a small valve on an elevated lube oil tank before jumping over the fence and leaving the area.

Describe Area Affected and Cleanup Action Taken.*

Contractors immediately closed the valve and vacuumed up free liquids. The DCP operator was immediately onsite. The valve handle was removed and the line plugged. Impacted soil was minimal and will be removed or remediated, as appropriate.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION
Printed Name: Rob Gough	Approved by Environmental Specialist:
Title: Senior Environmental Engineer	Approval Date: 9/6/2017 Expiration Date:
E-mail Address: rgough@dcpmidstream.com	Conditions of Approval: see attached directive Attached ☑
Date: 8/31/2017 Phone: 432-620-4166	

* Attach Additional Sheets If Necessary

fOY1724948836 nOY1724949101 pOY1724949867 1RP-4803

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _9/5/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4803__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _10/6/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

From: Yu, Olivia, EMNRD
To: Gough, Robert
Cc: Conder, Haskell P; Blair, Yvonne B; stucker@blm.gov
Subject: RE: DCP booster station lube oil release
Date: Thursday, September 07, 2017 9:44:30 AM

Mr. Gough:

Foremost, NMOCD sincerely appreciates your compliance and rapid response in addressing this release. A summary of our conversation this morning regarding 1RP-4803 about the path forward:

- Clarification re: spill volume. At any time the volume of release is >= 5 bbls, regardless of whether the fluid was contained or impacted surface, NMOCD must be notified and a C-141 submitted per NMAC 19.15.29. The only exception, in which a release characterization and remediation plan is not necessary, is if the release occurred in a lined secondary containment.
- NMOCD does not preclude the Responsible Operator from immediate corrective actions of the release, such as removal of impacted soil and vacuuming of free liquids.
- Due to the prompt response of the Responsible Operator, NMOCD determined that complete delineation and remediation of the release are not necessary. However, these are the information required for confirmation of corrective actions:
    - Scaled map with the release area outlined and confirmation sample location marked. Please mark the GPS coordinates of the release point.
    - 2 confirmation soil samples will be sent to an accredited laboratory for BTEX, TPH, and chloride analyses, using the methods specified in the directive appended to the reviewed initial C-141: 1 discrete sample from within the release area and 1 will be a composite of soil from the 4 cardinal directions of the excavated area.
    - Photo documentation of the release pre- and post- remediation, optimally geo-referenced and dated.
    - The proposed remediation is by excavation.
- The Responsible Operator will submit a short summary with the above documentation within 90 days.

Please be advised that if the 2 confirmation samples are not within permissible levels for BTEX, TPH, and chlorides, then complete delineation and remediation may be required.

Please inform if there are any missing points or additional clarification is required.

Thanks,
Olivia

From: Gough, Robert [mailto:RGough@dcpmidstream.com]
Sent: Wednesday, September 6, 2017 3:33 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Conder, Haskell P <HConder@dcpmidstream.com>; Blair, Yvonne B <YBBlair@dcpmidstream.com>
Subject: RE: DCP booster station lube oil release

Good afternoon Ms. Yu,

The Booster location is South Hat Mesa. This was a lube oil release and contractors were onsite to immediately remove free liquids. I would appreciate the opportunity to discuss the work plan in greater detail. When is the best time to reach you?

Thank you,

Rob Gough, PE
Senior Environmental Engineer

Eunice Gas Plant & Field

DCP Midstream, LP
10 Desta Drive, Suite 600 West
Midland, TX 79705
Ofc: 432-620-4166
Cell: 432-634-2589
e-mail: rgough@dcpmidstream.com

Know what's below-Call before you dig! ***8-1-1***

Rob

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Wednesday, September 06, 2017 3:58 PM
To: Gough, Robert <RGough@dcpmidstream.com>
Cc: Conder, Haskell P <HConder@dcpmidstream.com>; Blair, Yvonne B <YBBlair@dcpmidstream.com>
Subject: DCP booster station lube oil release

Dear Mr. Gough:

Please note that the name of the booster station was not provided and that the C-141 is accepted as initial only.

Also, please be advised that additional documentation will be required (e.g., photos and confirmation samples).

The 1RP for this incident is

4803	9/6/2017	A	DCP	Booster Station		21S-32E-4I	8/30/2017

Please note that a release characterization/delineation workplan as detailed in the attachment must be approved by NMOCD BEFORE any remediation work.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

Appendix B

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 05, 2017

ROBERT GOUGH

DCP Midstream - Midland

10 Desta Dr., #400-W

Midland, TX 79705

RE: SOUTH HAT MESA

Enclosed are the results of analyses for samples received by the laboratory on 11/29/17 16:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-9. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

DCP Midstream - Midland 10 Desta Dr., #400-W Midland TX, 79705	Project: SOUTH HAT MESA Project Number: NONE GIVEN Project Manager: ROBERT GOUGH Fax To: None	Reported: 05-Dec-17 12:07

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS01 @1'	H703275-01	Soil	29-Nov-17 12:00	29-Nov-17 16:10
4 WALL COMP	H703275-02	Soil	29-Nov-17 12:15	29-Nov-17 16:10

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

DCP Midstream - Midland 10 Desta Dr., #400-W Midland TX, 79705	Project: SOUTH HAT MESA Project Number: NONE GIVEN Project Manager: ROBERT GOUGH Fax To: None	Reported: 05-Dec-17 12:07

CS01 @1'

H703275-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*105 %*	*72-148*		*7112906*	MS	*30-Nov-17*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10	**12.0**		10.0	mg/kg	1	7112905	MS	30-Nov-17	8015B	
DRO >C10-C28	**1590**		10.0	mg/kg	1	7112905	MS	30-Nov-17	8015B	
EXT DRO >C28-C36	**3070**		10.0	mg/kg	1	7112905	MS	30-Nov-17	8015B	
Surrogate: 1-Chlorooctane			*94.7 %*	*28.3-164*		*7112905*	MS	*30-Nov-17*	*8015B*	
Surrogate: 1-Chlorooctadecane			*122 %*	*34.7-157*		*7112905*	MS	*30-Nov-17*	*8015B*	
Green Analytical Laboratories										
Soluble (DI Water Extraction)										
Chloride	<10.0		10.0	mg/kg wet	10	B712019	JDA	02-Dec-17	EPA300.0	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

DCP Midstream - Midland 10 Desta Dr., #400-W Midland TX, 79705	Project: SOUTH HAT MESA Project Number: NONE GIVEN Project Manager: ROBERT GOUGH Fax To: None	Reported: 05-Dec-17 12:07

4 WALL COMP

H703275-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7112906	MS	30-Nov-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*105 %*	*72-148*		*7112906*	MS	*30-Nov-17*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10	<10.0		10.0	mg/kg	1	7112905	MS	30-Nov-17	8015B	
DRO >C10-C28	**450**		10.0	mg/kg	1	7112905	MS	30-Nov-17	8015B	
EXT DRO >C28-C36	**1510**		10.0	mg/kg	1	7112905	MS	30-Nov-17	8015B	
Surrogate: 1-Chlorooctane			*91.0 %*	*28.3-164*		*7112905*	MS	*30-Nov-17*	*8015B*	
Surrogate: 1-Chlorooctadecane			*88.3 %*	*34.7-157*		*7112905*	MS	*30-Nov-17*	*8015B*	
Green Analytical Laboratories										
Soluble (DI Water Extraction)										
Chloride	<10.0		10.0	mg/kg wet	10	B712019	JDA	02-Dec-17	EPA300.0	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

DCP Midstream - Midland 10 Desta Dr., #400-W Midland TX, 79705	Project: SOUTH HAT MESA Project Number: NONE GIVEN Project Manager: ROBERT GOUGH Fax To: None	Reported: 05-Dec-17 12:07

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7112906 - Volatiles										
Blank (7112906-BLK1)				Prepared: 29-Nov-17 Analyzed: 30-Nov-17						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.104*		mg/kg	*0.100*		*104*	*72-148*			
LCS (7112906-BS1)				Prepared: 29-Nov-17 Analyzed: 30-Nov-17						
Benzene	2.00	0.050	mg/kg	2.00		100	79.5-124			
Toluene	1.96	0.050	mg/kg	2.00		97.9	75.5-127			
Ethylbenzene	1.90	0.050	mg/kg	2.00		94.8	77.7-125			
Total Xylenes	5.89	0.150	mg/kg	6.00		98.2	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0996*		mg/kg	*0.100*		*99.6*	*72-148*			
LCS Dup (7112906-BSD1)				Prepared: 29-Nov-17 Analyzed: 30-Nov-17						
Benzene	1.99	0.050	mg/kg	2.00		99.5	79.5-124	0.641	6.5	
Toluene	1.93	0.050	mg/kg	2.00		96.3	75.5-127	1.66	7.02	
Ethylbenzene	1.88	0.050	mg/kg	2.00		94.1	77.7-125	0.759	7.83	
Total Xylenes	5.86	0.150	mg/kg	6.00		97.6	70.9-124	0.585	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	*0.104*		mg/kg	*0.100*		*104*	*72-148*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

DCP Midstream - Midland 10 Desta Dr., #400-W Midland TX, 79705	Project: SOUTH HAT MESA Project Number: NONE GIVEN Project Manager: ROBERT GOUGH Fax To: None	Reported: 05-Dec-17 12:07

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7112905 - General Prep - Organics										
Blank (7112905-BLK1)				Prepared & Analyzed: 29-Nov-17						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*50.0*		mg/kg	*50.0*		*99.9*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*47.2*		mg/kg	*50.0*		*94.4*	*34.7-157*			
LCS (7112905-BS1)				Prepared & Analyzed: 29-Nov-17						
GRO C6-C10	219	10.0	mg/kg	200		110	76.6-119			
DRO >C10-C28	211	10.0	mg/kg	200		106	81.4-124			
Total TPH C6-C28	431	10.0	mg/kg	400		108	79.4-121			
Surrogate: 1-Chlorooctane	*53.8*		mg/kg	*50.0*		*108*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*48.9*		mg/kg	*50.0*		*97.8*	*34.7-157*			
LCS Dup (7112905-BSD1)				Prepared & Analyzed: 29-Nov-17						
GRO C6-C10	214	10.0	mg/kg	200		107	76.6-119	2.40	7.94	
DRO >C10-C28	214	10.0	mg/kg	200		107	81.4-124	1.19	9.83	
Total TPH C6-C28	428	10.0	mg/kg	400		107	79.4-121	0.621	8.57	
Surrogate: 1-Chlorooctane	*52.6*		mg/kg	*50.0*		*105*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*50.4*		mg/kg	*50.0*		*101*	*34.7-157*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

DCP Midstream - Midland 10 Desta Dr., #400-W Midland TX, 79705	Project: SOUTH HAT MESA Project Number: NONE GIVEN Project Manager: ROBERT GOUGH Fax To: None	Reported: 05-Dec-17 12:07

Soluble (DI Water Extraction) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B712019 - General Prep - Wet Chem										
Blank (B712019-BLK1)				Prepared: 01-Dec-17 Analyzed: 04-Dec-17						
Chloride	ND	10.0	mg/kg wet							
LCS (B712019-BS1)				Prepared: 01-Dec-17 Analyzed: 02-Dec-17						
Chloride	244	10.0	mg/kg wet	250		97.7	85-115			
LCS Dup (B712019-BSD1)				Prepared: 01-Dec-17 Analyzed: 02-Dec-17						
Chloride	244	10.0	mg/kg wet	250		97.6	85-115	0.0901	20	

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Rush

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: DCP Midstream	**BILL TO**
Project Manager: Robert Gough / Kyle Norman	**P.O. #:**
Address:	**Company:** Tasman Geo
City: **State:** **Zip:**	**Attn:** Kyle Norman
Phone #: **Fax #:**	**Address:**
Project #: **Project Owner:**	**City:**
Project Name:	**State:** **Zip:**
Project Location: South Hat Mesa	**Phone #:**
Sampler Name: Karanja Lewis	**Fax #:**

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides 300	TPH 8015 M EXT	BTEX	Texas TPH	Complete Cations/Anions	TDS
H703225																				
1	CS01 @1'		2			✓					✓		11/29/17	12:00	✓	✓	✓			
2	4 Wall Comp		2			✓					✓		11/29/17	12:15	✓	✓	✓			

Relinquished By:	**Date:** 11-29-17	**Received By:**	
	Time: 4:10		
Relinquished By:	**Date:**	**Received By:**	
	Time:		

Delivered By: (Circle One) 2.7°
Sampler - UPS - Bus - Other: Correct 2.95°

Sample Condition Cool ☑ Yes ☐ No Intact ☐ Yes ☐ No

CHECKED BY: (Initials) T.O. H15

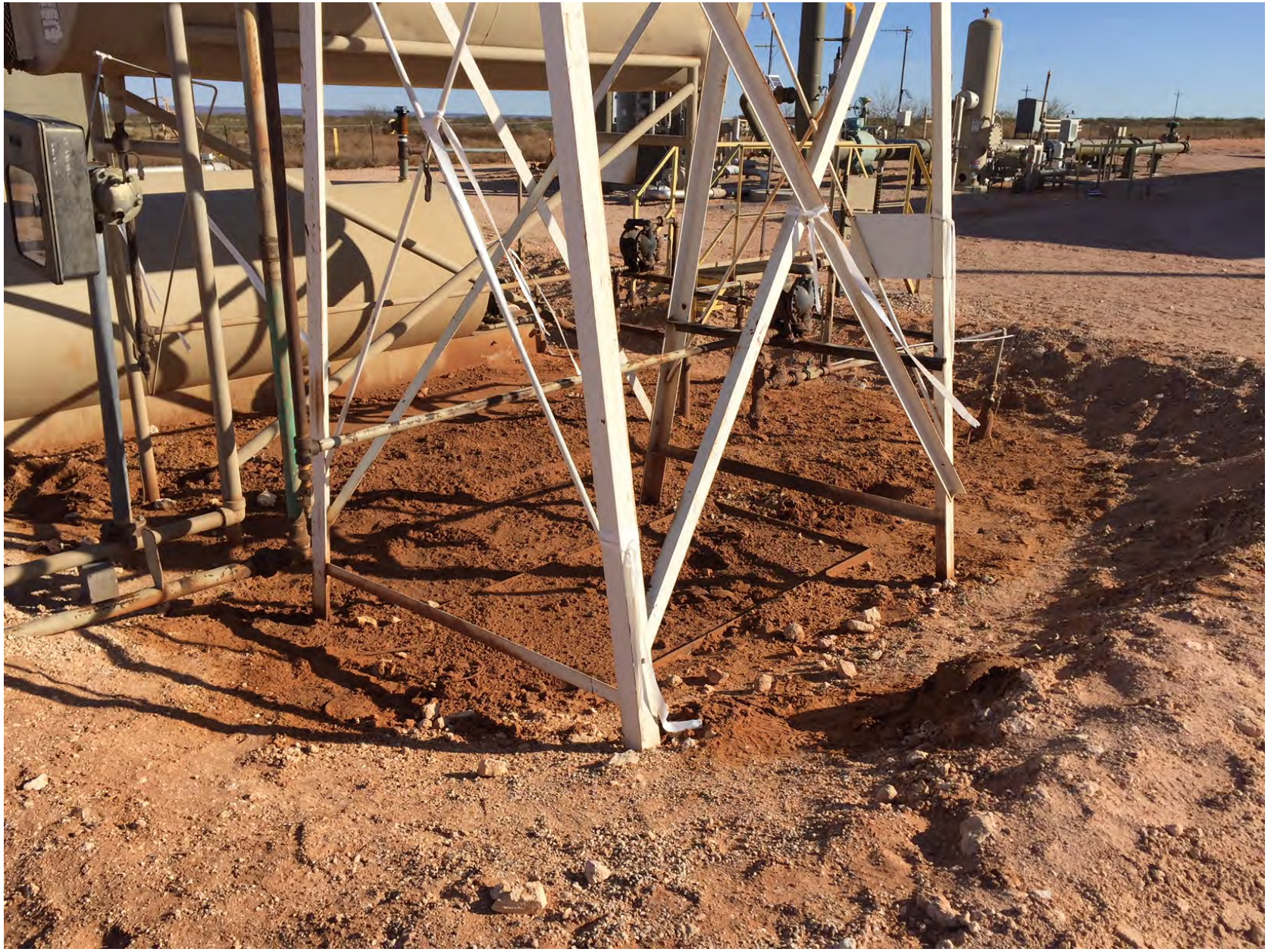
Phone Result: ☐ Yes ☑ No **Add'l Phone #:**
Fax Result: ☐ Yes ☑ No **Add'l Fax #:**
REMARKS:

email results: Gough, Robert <RGough@dcpmidstream.com>
knorman@tasman-geo.com:
klewis@tasman-geo.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Appendix C

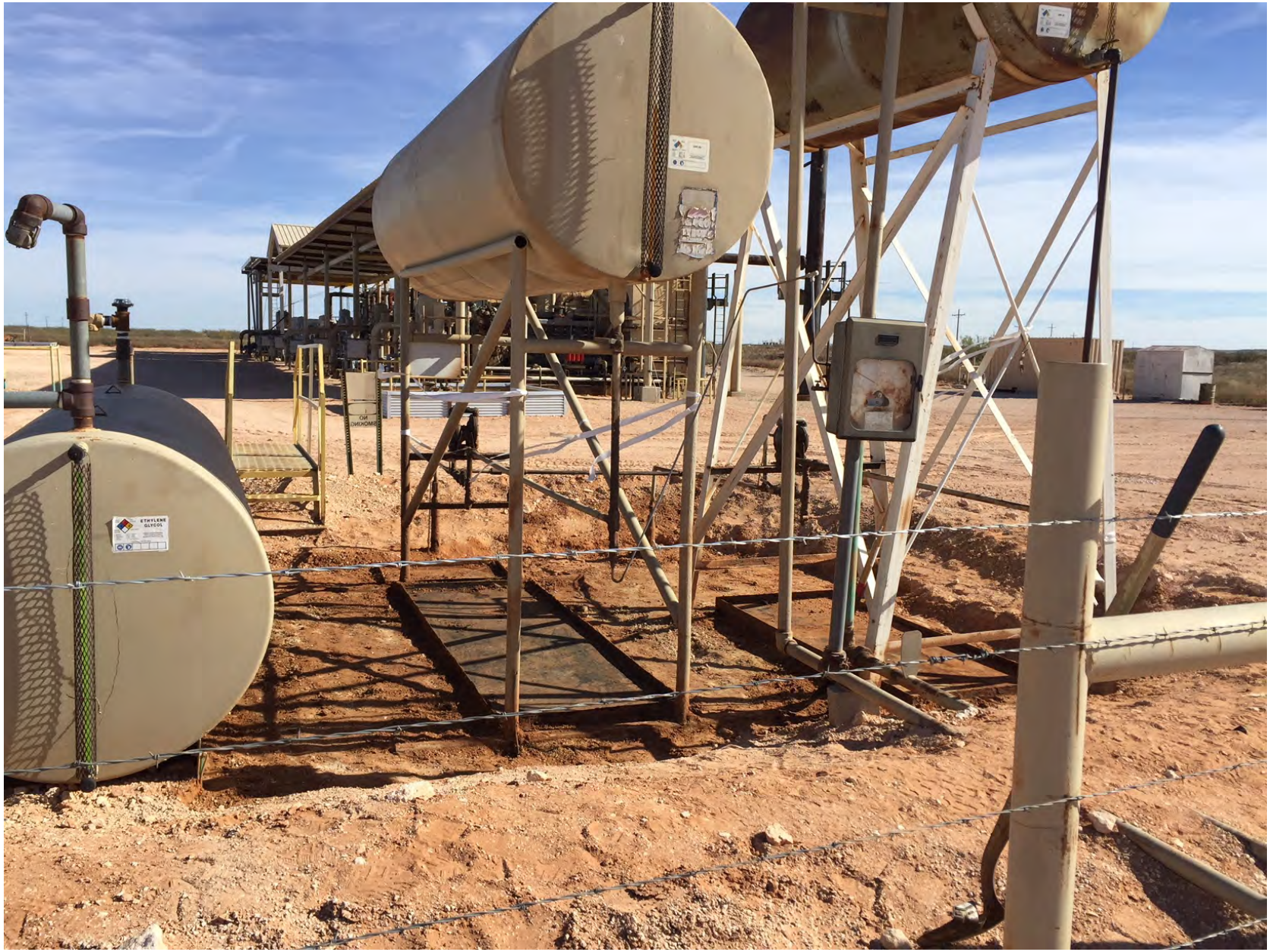
DCP Midstream South Hat Mesa 1RP-4803



Release, facing NE 11/29/2017

Release, facing NNW 11/29/2017

Excavating, facing W 11/29/2017



Excavated, facing E 11/29/2017

Excavated, facing W 11/29/2017

Appendix D

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 03151		ED	4	1	4	07	21S	32E	621119	3595526*	3950	1352		
CP 00793 POD1	CP	LE	1	1	2	01	21S	32E	628932	3598270*	4403	1000		
CP 01151 POD1	CP	LE				32	22S	36E	627037	3601186	4538	823		
CP 00794 POD1	CP	LE	4	1	1	18	21S	33E	629976	3594865*	5892	160		
CP 00795 POD1	CP	LE	4	1	1	18	21S	33E	629976	3594865*	5892	170		
CP 00798 POD1	CP	LE	2	1	1	24	20S	33E	629348	3603892*	8074	850		
CP 00317	CP	LE	3	4	3	05	20S	33E	623054	3607235*	10019	680	325	355
CP 00653 POD1	CP	LE		4	4	04	20S	33E	625573	3607367*	10071	60		

Average Depth to Water: **325 feet**

Minimum Depth: **325 feet**

Maximum Depth: **325 feet**

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 624628.19 **Northing (Y):** 3597340 **Radius:** 10100

***UTM location was derived from PLSS - see Help**